

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 4, 6 and 7 currently being prosecuted. The Examiner is respectfully requested to reconsider his rejections in view of the remarks as set forth below.

Finality of the Rejection

Applicants note that the Examiner has made the current a Final Rejection. Applicants disagree that this action should be final. It is noted that the Examiner has cited and applied a new secondary reference. In the previous response, only one word was changed in claims 4 and 6. This change did not require a citation of a new reference. That change was made to better define the invention and to support arguments that have been made for several responses. Applicants request the Examiner to review the finality of the present rejection.

Rejection Under 35 USC §103

Claims 4, 6 and 7 stand rejected under 35 USC §103 as being obvious over U.S. Patent No. 3,855,456 to Summers et al in view

of U.S. Patent No. 5,463,555 to Ward et al. This rejection is respectfully traversed.

The Examiner relies on Summers et al to show a basic system for detecting data on operating states of a thermal device, for storing data at specified time intervals, for storing failure data, for storing a second operating state data and outputting the data. The Examiner admits that Summers et al does not show collecting data at the starting point of each operating stage.

The Examiner relies on Ward et al to show manufacturing milestones as storing third operating state data at starting points. The Examiner feels that it would have been obvious to one of ordinary skill in the art to combine the data collection system of Summers et al with the collection of data at milestones shown by Ward et al. Applicants disagree that the Ward et al teachings can be combined with the Summers et al system and even if the teachings are combined, the present claimed invention would not obvious thereover.

The Ward et al system is an integration of a business transaction system with a process control system. A work order is stored in the business transaction system and interfaces with the manufacturing system so as to generate milestones to determine when

various points on the manufacturing cycle are started or completed. The Examiner is indicating that this type of information is equivalent to the collection of data at the starting point of each control stage of the operation of a boiler or similar device.

Applicants submit that this type of information is not compatible with the Summers et al system. Summers et al is concerned with the collection of various system variables and recording their currents at specified times. In Ward et al, the system is only noting when various milestones are reached and does not take into account the storage of operating parameters at these times. Furthermore, manufacturing milestones are not the same as starting points of a control stage. A manufacturing milestone is merely a listing of steps that occur in the manufacturing process and does not relate to the control parameters of that process.

Furthermore, Applicants submit that even if combined, the references do not teach the present claimed invention. Even if Summers et al does show the storing of data for a first number of intervals and dropping the oldest data as new data is added, and also shows the storing of detected data as failure data, Applicants submit that Summers et al does not show the storage of second

operating state data for second number of time intervals less than the first number of time intervals.

In answer to these arguments, the Examiner has referred to column 12, lines 17-28 as additional logs which produce an output of parameters. However, the claims describe storage of the same operating state data as is stored in the first number of intervals. This arrangement can be seen in Fig. 2 where operating state data is stored at intervals D3 - D10 for the failure event and two sets of data D11 and D12 are stored after the failure event. The same data is stored, but the number of time intervals after the event is much smaller than that before the event. In the Summers et al reference, the log described in column 11 stores detected data until failure. However, there is no teaching of storing this data for a second number of time intervals. The Examiner has referred to column 12 to teach this feature, but this is for different logs and not for the same log. Thus, the data which is being stored is different than in the original log. In the present invention, the same detected data is stored, but just for a fewer number of intervals after the failure.

Furthermore, the claims include the storing of this same type of operating data at the starting point of each control stage.

This is not a different type of data, but the same detected data. Claims 4 and 6 have now been amended to add language to emphasize that the data is the same in all three time periods. It is stored at the starting point of each control stage since this is often a point of error generation. As admitted by the Examiner, Summers et al does not show the storage of this third data. Also, as pointed out above, Ward et al only shows the generation of manufacturing milestones and does not show the storage of operating state data of each control stage. For these reasons, Applicants submit that method claim 4 and corresponding apparatus claim 6 are allowable over the cited references.

Claim 7 depends from claim 6 and as such is also considered to be allowable. This claim further recites the monitoring device.

Conclusion

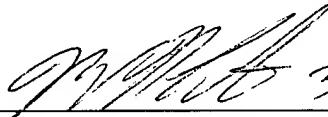
In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Reg. No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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